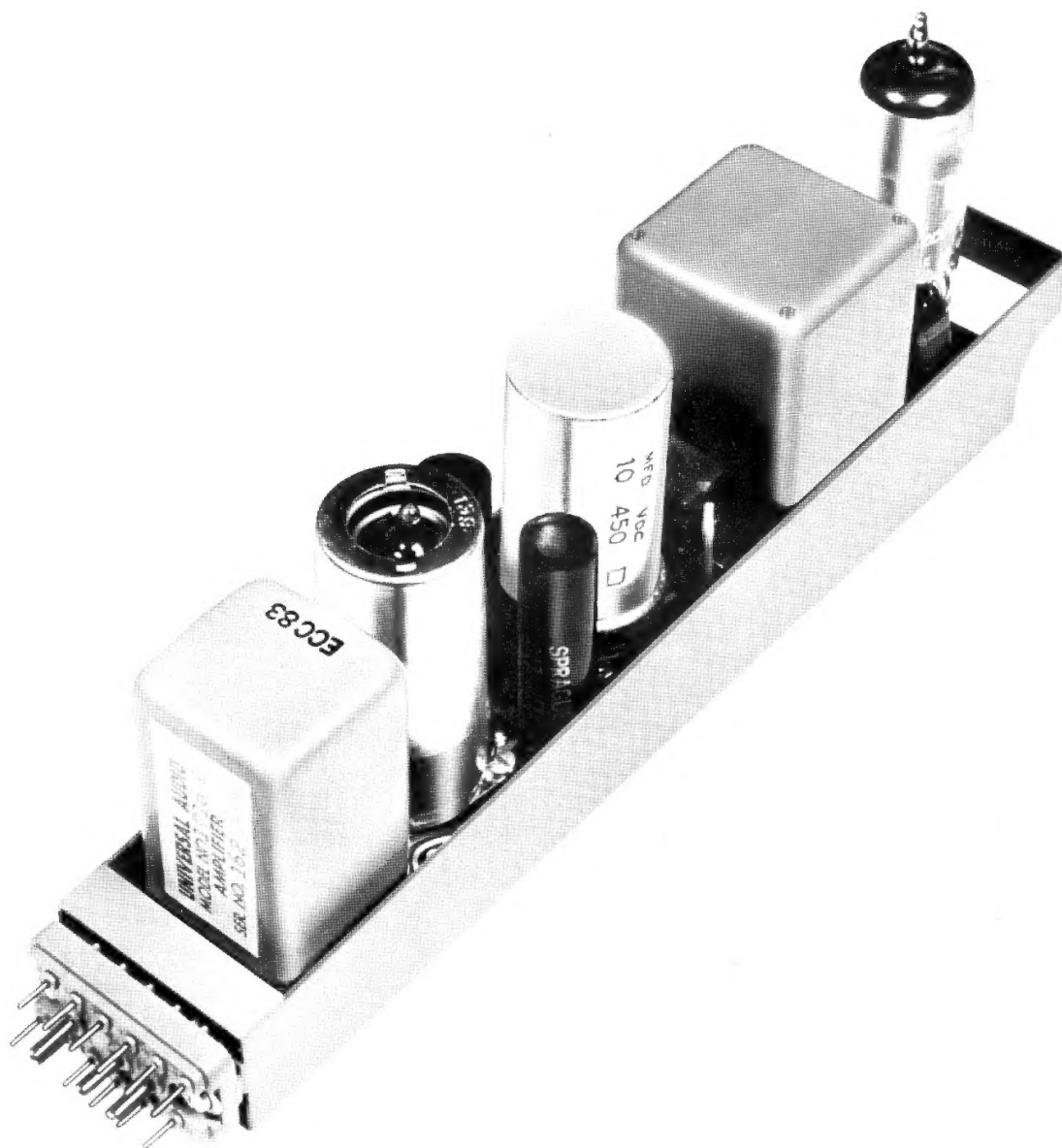




Universal Audio  
Division of Studio Electronics Corporation  
11922 Valerio Street, North Hollywood, California  
phone (213) 764-1500

## AMPLIFIER MODEL 1016



The 1016 is a miniature (1 1/2" wide including tray), plug-in amplifier. One unique feature of this unit is that, unlike the normal amplifier, this item is suitable for all applications; as a microphone preamplifier, a booster amplifier, or a line level program amplifier in any professional audio system. This allows for standardization and improved utility.

The 1016 is a push-pull, two stage amplifier that incorporates the highest quality, military type printed circuitry and precision 1 per cent resistors to assure reliability and optimum performance.



The 1016 can be operated on either a 6 or 12 volt system by a simple adjustment with no change in amplification.

The 1016 may be used in any service application required in the control console, i.e. microphone preamps, booster amplifiers and program amplifier. These variations can be made by a simple tube change. When a 12AY7 is used in the output stage the unit delivers +20 dbm and is ideally suited for use as a preamp or booster amp, requiring only 13 MA. B+ at 300 volts. Using a 12BH7 in the output, the amplifier delivers +30 dbm for use as a line, cue or program amplifier.

The gain can be varied from 35 db to 45 db by simply changing two resistors.

Frequency response extends a full octave beyond that of most conventional amplifiers. This amplifier is flat  $\pm 1$  db from 20 to 40,000 Hz. The tray of the 1016 fits inside the amplifier chassis. The overall width of only 1 1/2" gives more usable space on the chassis.

The use of glass epoxy printed circuitry boards, such as used in all military electronic equipment, insures long life and dependability.

#### PERFORMANCE SPECIFICATIONS

##### GAIN: Unloaded Input:

(Selectable)	40 db
	45 db
	50 db
600 ohm input:	35 db
(Selectable)	40 db
	45 db

FREQUENCY RESPONSE:  $\pm 0.5$  db 20 to 20,000 Hz  
 $\pm 1$  db at 40,000 Hz

POWER OUTPUT: Using 12BH7: + 30 dbm at less than 1% THD  
30 to 20,000 Hz  
Using 12AY7: + 20 dbm at less than 1% THD  
30 to 20,000 Hz

SOURCE IMPEDANCE: 50, 150 or 600 ohms

LOAD IMPEDANCE: 150 or 600 ohms

INPUT IMPEDANCE: Nominally five times rated source impedance.  
(Secondary of input transformer virtually unloaded).

OUTPUT IMPEDANCE: Designed to work into loads of 150 or 600 ohms. Internal output impedance is approximately 10% of rated load impedance.

PHASE SHIFT: Less than 50° 20 to 20,000 Hz  
180° point is 70 kHz

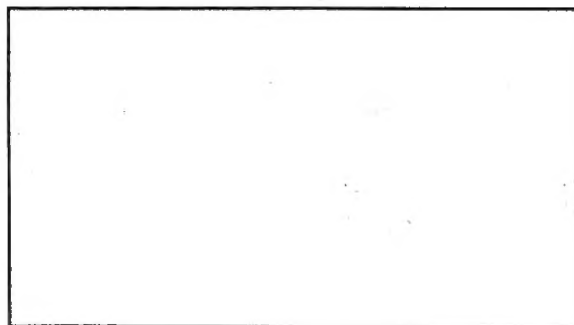
OUTPUT NOISE: Equivalent to an Input signal of -120 dbm  
+20 dbm output 13 M.A. at 300 VDC

POWER REQUIREMENTS: For +30 dbm output 34 M.A. at 300 VDC

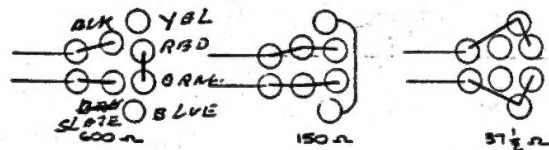
FILAMENT: 6.3V at .9 amps with 12BH7; .6 amps with 12AY7  
12.6V at .45 amps DC and .3 amps with 12AY7

TUBE COMPLEMENT: One 12AX7 (ECC83)  
One 12AY7 or 12BH7

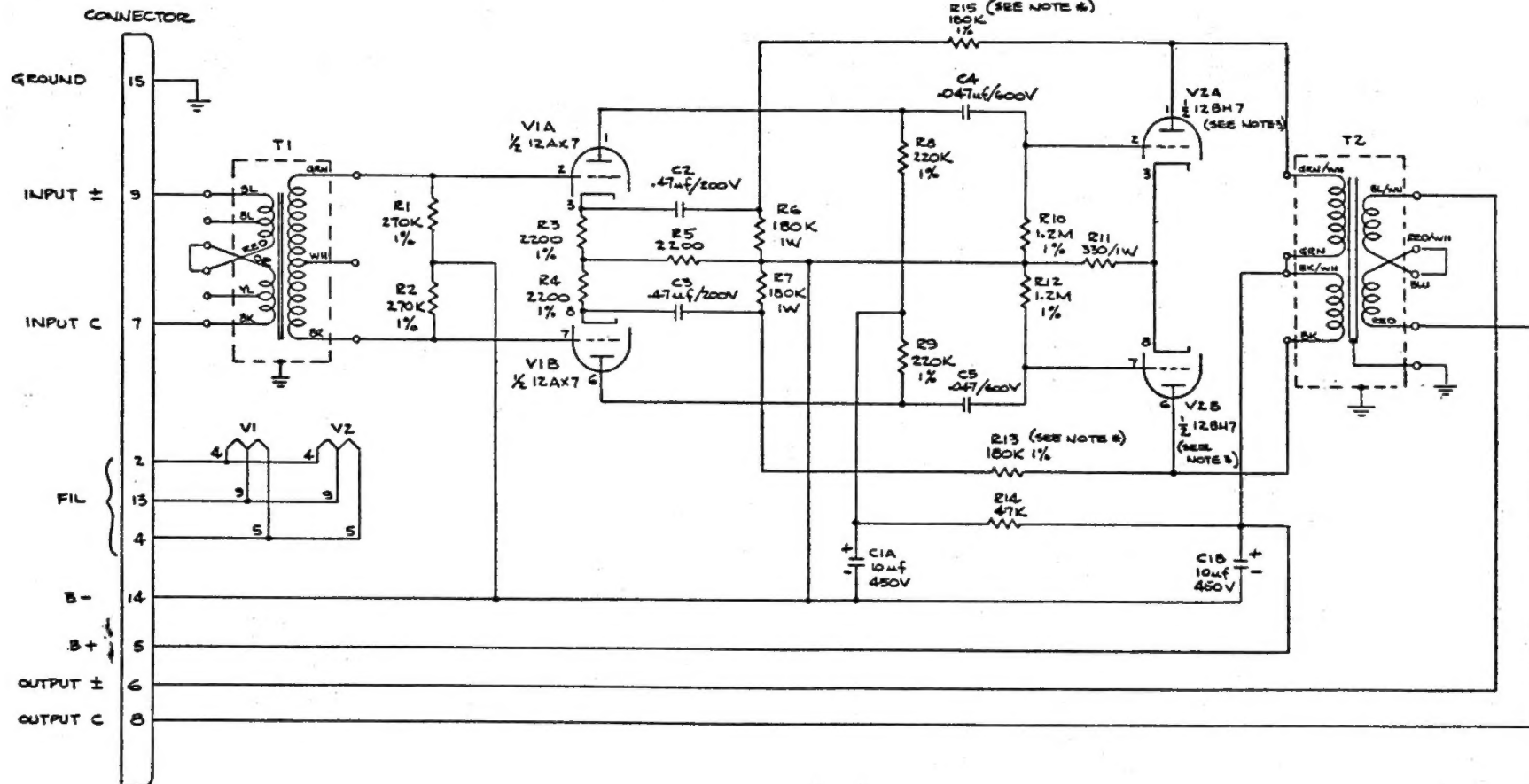
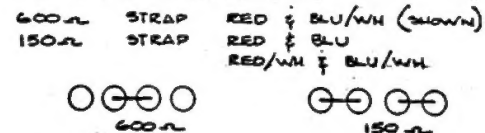
SIZE: 1 1/2" Wide (Including tray)  
3 1/4" High  
9" Long



## TERMINAL STRAPPING T1



## TERMINAL STRAPPING T2



## NOTE:

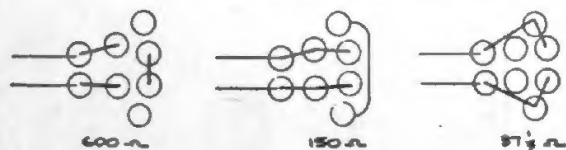
1. ALL RESISTORS  $\frac{1}{2}$  W, 5% UNLESS OTHERWISE SPECIFIED
2. R13 & R15 82K = 35 DB GAIN LOADED  
180K = 40 DB GAIN LOADED  
330K = 45 DB GAIN LOADED  
NORMALLY SUPPLIED WITH 40 DB GAIN
3. USING 12BH7 : + 30 DBM  
12AY7 : + 22 DBM

 UNIVERSAL AUDIO, INC.  
OF HOLLYWOOD  
6052 SUNSET BLVD.  
HOLLYWOOD 28, CALIF.

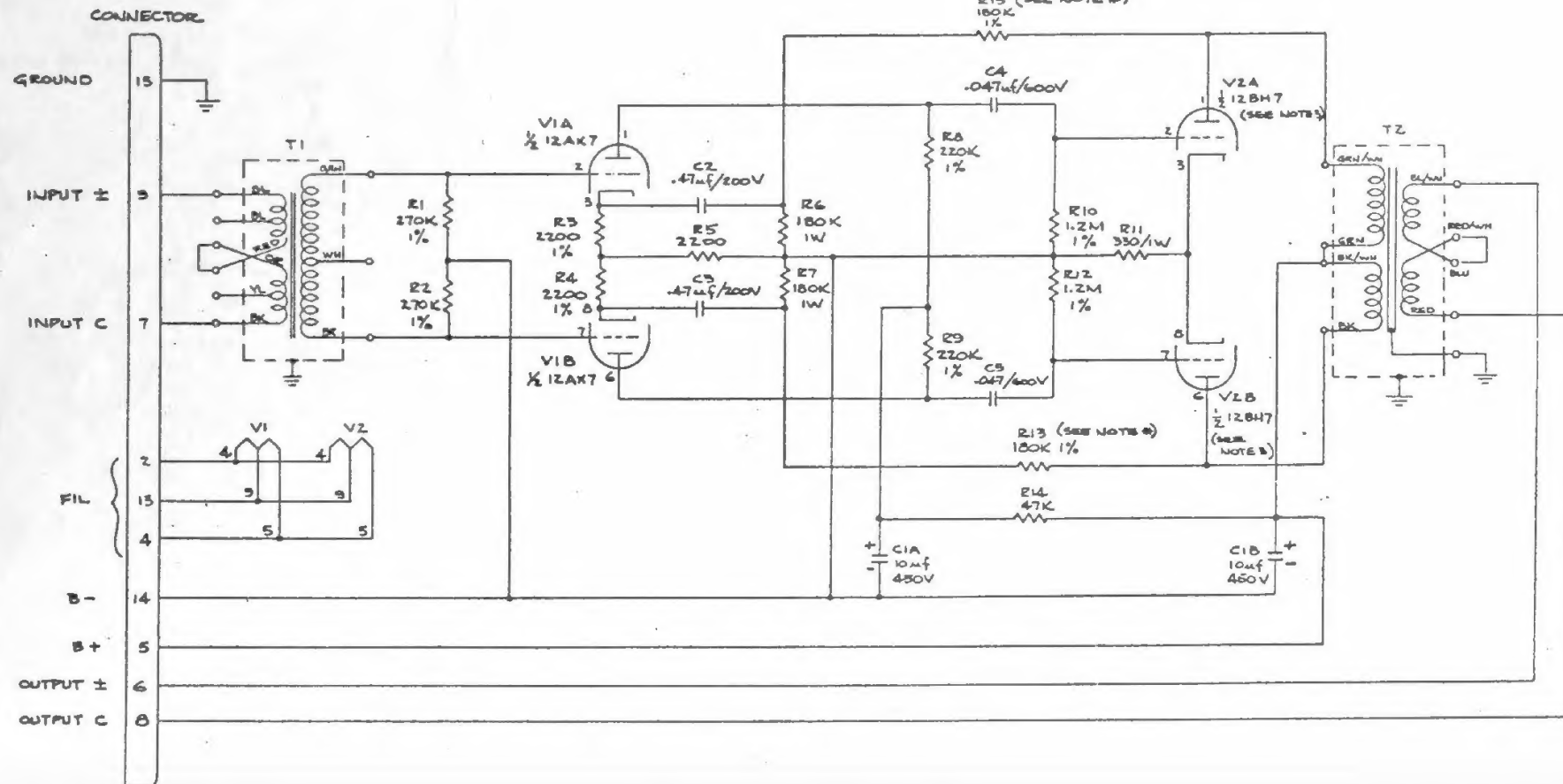
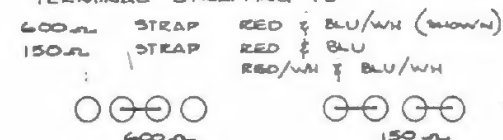
 PROGRAM OR  
PRELIMINARY AMPLIFIER  
MODEL 1016-B

 DRAWN/RECEIVED  
CHWD  
APPROD  
C-10014

## TERMINAL STRAPPING T1



## TERMINAL STRAPPING T2



## NOTE:

1. ALL RESISTORS  $\frac{1}{2}$  W, 5% UNLESS OTHERWISE SPECIFIED
- \* 2. R13 & R15 82K = 35 DB GAIN LOADED  
100K = 40 DB GAIN LOADED  
330K = 45 DB GAIN LOADED  
NORMALLY SUPPLIED WITH 40 DB GAIN
3. USING 12BH7 : + 30 DBM  
12AY7 : + 22 DBM

UNIVERSAL AUDIO, INC.  
OF HOLLYWOOD  
6052 SUNSET BLVD.  
HOLLYWOOD 28, CALIF.

PROGRAM OF  
PRELIMINARY AMPLIFIER  
MODEL 101G-B

DRAWN G. DE VILLAS  
CHKD  
APPRO

C-10014